

Hg. 1

Surface of the bottle-like container (TiO2 photocatalyst processed surface) O2-(negative-charged oxygen molecule) O<sub>2</sub> (oxygen adhered on the surface) H<sub>2</sub>O (water adhered on the surface) OH (hydroxyl free radical) **UV** light Fig. 2 electric hole Φ H<sub>2</sub>O oxidation reduction